Department of Toxic Substances Control

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March 11, 2005

RESPONSE TO COMMENTS ON THE REMEDIAL ACTION PLAN, CENTRAL LOS ANGELES HIGH SCHOOL #11, FIRST STREET AND BEAUDRY AVENUE, LOS ANGELES

Dear Concerned Community Member:

Thank you for submitting written comments to the Department of Toxic Substances Control (DTSC). The written comments present questions and concerns regarding the Remedial Action Plan (RAP), prepared by Meredith & Associates, for the Central Los Angeles High School #11. The RAP presents the proposed remedial alternative for the School based on an evaluation of remedial alternatives per California Health and Safety Code, Section 25356.1.

DTSC has reviewed all the comments received in writing and during the public meeting held on January 19, 2005. Enclosed is the response to comments (Attachment) addressing the questions and concerns raised. After careful consideration, DTSC has determined the proposed remedial action activities are appropriate and the RAP has been approved. DTSC will be closely involved in the development of the Remedial Design for the School and will provide oversight throughout implementation of the approved remedial action and future Operation and Maintenance activities.

If you have any questions, please contact Ms. Jennifer Jones, Project Manager at (818) 551-2973 or me at (818) 551-2876.

Sincerely,

Hamid Saebfar, Chief
School Property Evaluation and Cleanup Division

Enclosure

cc: See next page.

ATTACHMENT 1

RESPONSE TO PUBLIC COMMENTS ON THE
DRAFT REMEDIAL ACTION PLAN (RAP)
FOR THE PROPOSED CENTRAL LOS ANGELES HIGH SCHOOL #11
(FORMERLY KNOWN AS THE BELMONT LEARNING CENTER)

I. INTRODUCTION AND BACKGROUND

The Proposed Central Los Angeles High School #11 (formerly known as the Belmont Learning Center) Site is located north of the intersection of First Street and Beaudry Avenue in Los Angeles. The Los Angeles Unified School District (LAUSD) acquired the approximately 35-acre Site in the early 1990s and began grading and development. In November, 1998, environmental concerns at the Site were brought to the attention of the Department of Toxic Substances Control (DTSC) by Assemblyman Scott Wildman and other public officials. At that time, DTSC determined further investigation was required prior to completion of construction. In February, 1999, LAUSD entered into a Voluntary Corrective Action Agreement with DTSC to conduct a comprehensive environmental investigation of the Site. A Draft Remedial Investigation (RI) was conducted in 1999. Based on the initial investigation, DTSC determined remedial action was required to address the environmental issues. In 2000, construction of the school was halted by the Los Angeles School Board due to environmental concerns.

In July 2002, the School Board voted to proceed with the Belmont Learning Center investigation and complete the Remedial Investigation and Feasibility Study. During an extensive seismic investigation of the Site, an earthquake fault located under two buildings at the Site could not be demonstrated to be inactive. As a result, the School Board again halted the project in late 2002.

During early 2003, LAUSD and the School Board considered various options for the Site. In May, 2003, the School Board voted to proceed with the project as the Central LA High School #11 and Vista Hermosa Park. To comply with state laws regarding construction over an active earthquake fault, the project includes demolition of the two buildings over the fault, which would be rebuilt beyond the required 50 foot seismic buffer zone.

A Remedial Investigation/Feasibility Study Report (Report) of the entire 35-acre Central Los Angeles High School #11 Site was completed in November 2003. The Report contains a Health Risk Assessment based on data collected from many different environmental investigations over several years. Based on the analysis of over one thousand samples (approximately 670 soil samples, 530 soil gas samples, and 80 groundwater samples), 40 chemicals of concern were identified and evaluated in the Health Risk Assessment. The Health Risk

Assessment concludes the chemicals of concern that contribute to an increased health and safety risk at the Site are hydrogen sulfide and methane, present in soil gas at various depths below ground surface. For this reason, mitigation measures are required to prevent the accumulation of methane in enclosed spaces and any potential exposure to hydrogen sulfide to students, staff or faculty at the Site.

The Draft Remedial Action Plan (RAP) has been prepared to address methane and hydrogen sulfide detected in soil gas samples at the Site. The Draft RAP provides the proposed remedial alternative or cleanup plan for the school including detailed engineering designs for the gas mitigation system to be installed during construction. The RAP was prepared in accordance with the California Health and Safety Code (H&SC) section 25323.1.

The draft RAP was under public review from January 7, 2005 to February 7, 2005. A public meeting was held on January 19, 2005 to present the draft RAP and receive and respond to comments and concerns. Several comments on the RAP were received during the public comment period. All comments regarding the RAP or environmental issues are included below. Comments #1 – 6 were received by DTSC in written form. Comments #7a - 16 are quotations taken directly from the court reporter's transcript of the public meeting. All comments are reproduced here as received in writing or as recorded by the court reporter during the public meeting.

II. RESPONSE TO COMMENTS

The written comments are grouped by individual commenter with DTSC responses following.

Public Comment 1a

Hamid Saebfar, Schools Division Chief, DTSC opened up the meeting by stating that the Los Angeles Unified School District (LAUSD) brought the case to DTSC in 1998 and asked for the assistance of DTSC. Nothing could be further from the truth. Assemblyman Scott Wildman, while conducting a JLAC hearing in 1998, requested DTSC to examine the activities taking place at the site of the Belmont Learning Complex.

DTSC took a bold step and shut down a 70% (per cent) complete, 235 million dollar fiasco project of attempting to build a high school over the former Los Angeles Oilfield without first testing in the areas where the school buildings were to be erected. Also, without installing an active gas removal system with a membrane barrier to prevent the hydrogen sulfide and methane gases from poisoning the students. DTSC also shut down the removal of contaminated soil from the site without the proper testing procedures.

DTSC Response 1a

DTSC recognizes the important role former Assemblyman Scott Wildman played in the history of the Belmont Learning Complex. At the time, there was no legislation requiring school districts to conduct an environmental investigation of proposed school property to the extent it is now required. Mr. Saebfar was referring to the fact that in 1999 LAUSD agreed to enter into a Voluntary Corrective Action Agreement with DTSC for the Site. This Agreement gave DTSC jurisdiction and authority to oversee and approve the environmental assessment of the Site. Legislation that requires DTSC to oversee a rigorous environmental review and cleanup process of all proposed school sites that will receive State funding for acquisition or construction became effective in January 2000.

Public Comment 1b

The developers and LAUSD had permitted the removal of over 400,000 cubic yards of soil from waste oil pits and oil drilling operations (presumed hazardous waste) without proper testing so that no one would know which soil contained hazardous waste. Most of the soil removed from the site was taken to Bradley Dump and Scholl Canyon Landfill under a “Contaminated Soils” manifest, not an EPA Manifest. This was because LAUSD never wanted to admit they had purchased a contaminated former oilfield site to build the Belmont Learning Complex which originally started out as the highest of three bids at $95 million dollars.

The 24 acre portion of the site was purchased “AS IS” for $30 million dollars. During the purchase LAUSD had the site appraised for $35 million without regard to any contamination on the site. Through change orders and mistakes the cost mushroomed to $235 million dollars when 70% complete at the site. Looking at what LAUSD is proposing to do to complete this project will put the final cost well over a half of a billion dollars.

DTSC Response 1b

Construction grading and development of the Site occurred prior to any DTSC involvement. DTSC does not have evidence of any illegal disposal of hazardous waste from the Site. The Los Angeles District Attorney's Office conducted an extensive and thorough investigation of potential violations of law related to this Site, and declined to pursue legal action.

A comprehensive characterization of the current soil conditions at the Site has been conducted throughout the Remedial Investigation process. Based on the Human Health Risk Assessment conducted during these investigations, the current soil conditions do not pose a threat to public health or the environment.

Public Comment 1c

There is no guarantee of the passive system LAUSD is proposing to have installed and DTSC appears to have already approved in its literature handed out and on its website regarding this project.

Is DTSC proposing to have students become canaries?

DTSC Response 1c

The proposed mitigation system includes passive venting combined with active air sweep for the school buildings. The system consists of multiple redundant elements to prevent gas from moving into the building coupled with a rigorous monitoring program. These elements meet and/or exceed the Los Angeles City Building and Safety requirements for methane mitigation. The system was designed by an engineering company (SCS Engineers, Long Beach, CA) with specialized expertise in methane mitigation system design. During the Feasibility Study (Meredith & Associates, 2004), each element of the proposed mitigation system was critically reviewed by DTSC Engineering Staff. SCS provided a detailed design development report and case studies where these mitigation systems have been effectively implemented in locations all over California and the United States (FS, Appendix B).

The main objective of DTSC is to protect public health and the environment. Based on evaluation of the proposed mitigation system design, DTSC is confident that the proposed system will be protective for school children and all other members of the school community. The Remedial Design for the school will be subject to review and approval by DTSC, and DTSC will provide oversight throughout installation of the system and on-going Operation and Maintenance activities.

Public Comment 1d

DTSC should know something is fishy. LAUSD even changed the name of the site from THE BELMONT LEARNING COMPLEX to CENTRAL HIGH #11 hoping the public would forget their folly.

DTSC Response 1d

DTSC is not involved with name changes of schools. Many proposed school sites go through name changes for various reasons.

Public Comment 1e

LAUSD had kept DTSC out of the loop since 1991.DTSC had been asleep at the switch. DTSC was nowhere to be found between 1992 and 1998 when it came to

the Belmont Learning Complex. The last correspondence between the two agencies was 12/23/91; exhibit number 355 of the LAUSD Inspector General Don Mullinax's Investigation & Reports.

The Inspector General of the LASUD and his staff of retired federal agents did an outstanding job in putting together over 12 volumes of exhibits in 1999 regarding the purchase and development of the Belmont Learning Complex and presented his findings to District Attorney Gil Garcetti, City Attorney James Hahn and Attorney General Bill Lockyear.

After a review, all three agencies issued a rejection on the same day. This in itself was a miracle for all three agencies to agree on anything together. All three had the same campaign manager.

DTSC Response 1e

Prior to November 1998, DTSC was not involved in the site because school districts were not required to obtain approval from DTSC of a proposed school site with respect to environmental contamination. Effective January 2000, revisions to California Education Code require DTSC to oversee a rigorous environmental review and cleanup process of all proposed school sites that will receive State funding for acquisition or construction.

Public Comment 1f

Exhibit 355: Inspector General's report. The letter was addressed to: Ms. Suzie Wong, Director, Environmental Health, LAUSD, from Miguel Monroy, Unit Chief, Site Mitigation Branch, DTSC, RE:ENFORCEABLE AGREEMENT REQUEST FOR CONSIDERATION RESPONSE.

"The DTSC has reviewed the LAUSD October 2, 1991 correspondence requesting the Department's consideration on a few matters pertaining to the Belmont New Elementary School No. 3 Site Draft Enforceable Agreement. The Department concurs with LAUSD's recommendation to further remediate the site and anticipates providing further oversight. Based on the extent of contamination documented in the Preliminary Endangerment assessment and LAUSD's historical cooperation, the Department does not foresee a need to add the site to the Bond Expenditure Plan."

DTSC Response 1f

The Belmont New Elementary School No. 3 Site is not the same site as the Belmont Learning Center. The Belmont New Elementary School No. 3, now known as Esperanza Elementary School, is located at 680 Little Street, Los Angeles, at the intersection of Union Avenue and 7th Street. The site was

investigated by DTSC from 1990-1993, and certified by DTSC on March 30, 1993.

Public Comment 1g

Compare with the letter of March 18, 1999, From: Yi Hwa Kim, Deputy Director of Environmental Health & Safety, LAUSD, To: Sayareh Amir, Unit Chief, DTSC Exhibit #239, Inspector General's Report.

"This responds to your letter of March 11, 1999, requesting that the LAUSD discontinue ongoing soil analysis and removal activities at the Belmont Learning Center site pending certain testing and approval by your Department." "We believe that the additional oversight proposed in the DTSC's March 11 letter would be duplicative of that already being performed by the RWQCB and unnecessary. It would also exceed the scope of the DTSC oversight activities that the LAUSD has agreed to reimburse in the Voluntary Corrective Action Agreement (VCAA) and would constitute an unauthorized use of District Funds."

The RWQCB was also asleep at the switch. They provided no meaningful oversight of LAUSD and developer activities at the Belmont Learning Complex site. The RWQCB let LAUSD and the developer do as they please. There was no agency present to police the activities that were occurring by LAUSD and the developer. They knew they should install an active methane gas system before the erection of any building. It's in the Inspector General's Reports and Exhibits if anyone would take the time to read them.

The above letter shows LAUSD did not want DTSC involved in how LAUSD was handling the disposal of soil from the site because LAUSD was pulling the wool over the eyes of regulatory agencies.

DTSC Response 1g

DTSC cannot comment on the intent of the LAUSD letter or RWQCB activities.

Public Comment 1h

DTSC expected LAUSD to keep them informed and remediate the site. What happened?
There was no further contact between the agencies until after the LAUSD had demolished the site, cut and removed hills of the oilfield, constructed 70% of the building on the site without testing for hydrogen sulfide and methane gases, changing forever the existing pathways of hydrogen sulfide and methane gases and establishing a different "FOOTPRINT" at the site forever.

DTSC Response 1h

DTSC signed the Voluntary Corrective Action Agreement in 1999, at which time the school had been partially constructed. Prior to 2000, school districts were not required to obtain approval from DTSC of a proposed school site with respect to environmental contamination.

Public Comment 1i

Exhibit #361, 8/17/89 of the LAUSD Inspector General's Reports:
Memorandum, To: File, From: R.K. Baker, District Deputy, Department of Conservation-Division of Oil and Gas
Subject: Proposed LAUSD Building Site in the Los Angeles Oilfield

"On August 16, 1989 I spoke with John Treadway, Director of Facilities Design, LAUSD, regarding the above proposed school site. I outlined to Mr. Treadway the following concerns that this Division had regarding the proposed school site. " "I informed Mr. Treadway that the Division recommends against building structures over old oil wells. The School District would be increasing the risk of gas accumulation in the area (if a natural gas seep were present or if one of the wells leaked) by replacing the existing small single-family home building footprints with one large school building footprint. With the small single-family footprint (if gas were to seep to the surface) it could safely vent itself to the atmosphere through the surrounding open-grass yards. However, with large school building footprint and associated paved parking areas, the gas would have an increased chance of accumulating and possibly cause major problems."

Hamid Saebfar at the January 19th, 2005 meeting stated," not enhancing any gas migrations to the surface." Isn't this what occurs when you replace a small "footprint" with a large school building complex "footprint"?

DTSC Response 1i

The small single-family homes historically present at the site had no mitigation systems beneath them. Since they were small, the effect of their "footprints" on gas migration at the site was minimal, as gases could easily migrate around the small slabs and be vented naturally to the atmosphere through open grass lawns and other landscaped areas. A larger building, such as the proposed school, would occupy a larger footprint whereby gases would have greater potential to accumulate. For this reason, the proposed gas mitigation system is needed to provide a preferential pathway to vent gases to the atmosphere and prevent accumulation under the school buildings. Please note also that none of the buildings were constructed over old oil wells.

Public Comment 1j

Hamid also stated DTSC has worked on 1400 other school sites. Has DTSC ever worked on a school site over an unstable oil field with unknown abandoned oil wells, where entire hills of an oil field were cut away?

Has anyone thought about what occurred when LAUSD changed the movement of natural flowing hydrogen sulfide and methane gases of the Los Angeles Oil Field when they carved away the hills exposing covered unknown abandoned wells and gas veins?
By changing the pattern and direction of naturally occurring gases at an unstable oil field, has the LAUSD exposed the surrounding public to future serious and deadly harm?

DTSC Response 1j

DTSC has experience with several other school sites built on or near oil fields. The Central Los Angeles High School #11 site is unique. The Site has been extensively investigated, providing DTSC with a comprehensive set of data from over one thousand samples of soil, soil vapor, and groundwater. Two independent studies of the oil field were conducted (Spivak, 2001; Schlumberger, 2002), concluding that the oil field was unlikely to re-pressurize and that pressurization could be effectively monitored. Geophysical magnetometer studies at the Site (Meredith & Associates, 2002) identified all abandoned oil wells, which were located and properly abandoned according to the California Division of Oil, Gas and Geothermal Resources (DOGGR). In addition, a geotechnical study (Earth Consultants International, 2003), which entailed over one mile of trenches cut into the earth to study the soil and rock, enabled a thorough assessment of the fate and transport of gases as it currently exists at the Site. Based on the vast amount of information collected at this Site, DTSC is confident the proposed mitigation system is protective of public health.

Public Comment 1k

Exhibit # 360, LAUSD INSPECTOR GENERAL'S REPORTS December 1989, Los Angeles City Planning Case 87-0168, Central City West specific Plan draft EIR, p317-330.
ENVIRONMENTAL SETTING "A report published in 1961 establishes the field's use as early as 1769 when Spanish settlers recognized the value of the oil seeps for lamp fuel." "An attempt to extract oil was made in 1865 at the corner of Temple and Boylston streets, this attempt was unsuccessful because of the presence of sulphureous gases and tar fumes. By 1902, 1044 wells were operated by 164 producing companies. During 1895 *the field produced about seven hundred forty nine thousand six hundred and ninety five (749,695) barrels of oil*. While few active oil wells remain, the map shows that the Temple-Beaudry

Hill area was blanketed with oil wells and related facilities. Some of the existing vacant lots can be explained by the past existence of these wells.
"State records indicate that about 29 active wells and 210 abandoned wells are within the Temple-Beaudry area. Using 1988 estimates for the amount of oil produced per day, the wells in Temple-Beaudry Hill area generate about 61 barrels of oil per day."
"The Temple-Beaudry Hill area is located in an area of known gas seeps which have the potential to contain hazardous biogenic gases. Gas levels are maintained at relatively low levels by the active pumping of the field. Both the State Division of Oil & Gas and the City Fire Department are concerned with the possibility of reducing the activity of this field to a point where gas accumulates to dangerous levels. When structures are built over or near the gas sources, explosions or fires may occur. Since it is difficult to predict a safe level of activity of the field in conjunction with this project, a study to estimate the likehood of gas accumulation should be done of the area before development occurs."pg328
"Historical records describing the Los Angeles City Oil Field are incomplete, as they do not describe the depths of the wells or materials used to construct the wells and do not describe the method of abandonment."

DTSC Response 1k

Due to the concern for potential re-pressurization of the oil field when oil field production is discontinued, two independent studies of the oil field were conducted at the Site (Spivak, 2001; Schlumberger, 2002), concluding that the oil field was unlikely to re-pressurize and that pressurization could be effectively monitored. A monitoring well, called LAUSD #1B, was installed adjacent to the Site specifically to monitor for re-pressurization and to relieve pressure if it was detected.

In a letter to LAUSD dated December 11, 2003, DOGGR wrote the following:

"After staff review of these studies, it is the opinion of the Division of Oil and Gas (Division) that the observation well LAUSD #1B should be sufficient to properly monitor the portion of the Los Angeles city oil field reservoir that underlies your project. This conclusion is supported by the following:

1. Monitoring data from the LAUSD #1B well has shown no indication of any pressure increase or fluid level risk since monitoring commenced in 1998.
2. Reservoir pressure is so low that the well could not support a full column of water for the case-hole gamma ray logging in June of 2002.
3. Geologic and Reservoir Engineering data indicates reservoir is primarily a gravity drive, not a water drive reservoir.
4. Offset producing wells penetrate the lower zone of the reservoir, as does the LAUSD #4 well.
5. Production rate in the field are extremely low, 1 to 3 b/d and have maintained that rate for quite some time.

6. The Schlumberger Report indicates that the low production decline rate is due to the low oil viscosity, small drainage area and gravity drive in the reservoir.

7. There is very little gas in the oil as most of the original gas gap, if there ever was one, was blown down in the early 1900's.

8. The study indicates an oil recovery factor of 12.4 percent, which is not indicative of a field with a natural water drive component."

The letter goes on to state "Also, at the time this pressure relief well recommendation was made, the LAUSD plans called for some of the buildings to be constructed over a few of the old wells. The LAUSD later redesigned the project where all the buildings were relocated to the south, away from the wells."

DTSC agrees that no structures should be built over or near active or abandoned oil wells. Doing so would violate Los Angeles City Building and Safety requirements as well as requirements of DOGGR and various other federal, state and local requirements. DTSC would not approve plans for such construction, and the proposed site plan is in compliance with all applicable or relevant and appropriate requirements regarding construction.

Public Comment 1l

Exhibit #362, Inspector General's Reports, 4/20/90 To: Robert Niccum, LAUSD, From: R.E. Corbaley, Environmental Supervisor, DOGGR, "The Division recommends that the active well on the site not be abandoned. This active well is one of the few remaining oil producers in the Los Angeles Oil Field. As such, it is necessary to maintain the well so as to provide a means for continued pressure monitoring of the oil zone. If the well is abandoned, the oil zone may repressure due to aquifer influx that could force oil and methane gas to migrate to the surface, resulting in a hazard to overlaying structures." "No building intended for human occupancy should be located near any active well unless suitable safety and fire protection measures and setback are approved by the local fire department."
Compare these exhibits with the MERIDITH & ASSOCIATES REPORT page3-7 & 3-8
"Methane and hydrogen sulfide movement via advective transport is not expected to be significant, because the Los Angeles City Oil Field production zone is not under pressure, has little gas in solution, historically had no record of gas production, and is unlikely to become re-pressurized in the future.

Apparently MERIDITH & ASSOCIATES and DTSC have never read or considered the reports and findings of the LAUSD Inspector General.

DTSC Response 1l

The DOGGR recommendation cited in the Inspector General's Report was made prior to the oil field studies conducted in 2001 and 2002. Based on these studies, DOGGR revised its recommendation regarding oil field pressure monitoring (see DTSC Response 1k above).

The pressure monitoring well, LAUSD #1B, was constructed according to DOGGR standards for on-going monitoring of reservoir pressure. Appropriate setbacks and safety and fire protection measures have been incorporated into the proposed construction of the school.

Public Comment 1m

LAUSD and the developer had done minimal testing in the area where the buildings were constructed stating that the methane stopped at Colton Avenue. This false theory was swallowed by the Los Angeles City Fire Department who was the only agency at the time doing any oversight of the activities of the LAUSD and the developer.

Unhealthy concentrations of methane and hydrogen sulfide were detected under the buildings after DTSC ordered testing not previously sampled in the area of building construction. These reading were taken during the winter months. DTSC & MERIDITH & ASSOCIATES are taking the position there is no methane or hydrogen sulfide gas under the buildings. These samples were taken in the summer of 2004 in the middle of a drought.
Why hasn't DTSC required additional samples be taken after the recent heavy rain? Anyone with knowledge of the impact of rain on an oil field is going to expect the same readings obtained by ESC in the winter of 1998.

DTSC Response 1m

ESC conducted soil gas sampling from April – May, 1999. Results of this sampling did not indicate concentrations significantly higher or lower than concentrations detected during more recent sampling. The gas mitigation system was designed to protect against the highest concentrations of methane and hydrogen sulfide that have been detected during the investigations at the site, regardless of whether the concentrations were detected during a dry year or a wet year. The system is designed to ensure that if these gases migrate to the surface at any concentration, they will not accumulate beneath buildings or paved areas at concentrations that would present a threat to human health or safety. Long-term Operation and Maintenance to be conducted under DTSC oversight will continue to monitor soil gas levels at the school.

Public Comment 1n

DTSC is supposed to be an advocate for the people to safeguard the health of schoolchildren and not a partner to a school district willing to turn schoolchildren into canaries.
LAUSD has a history of purchasing contaminated property for school sites. Look at Jefferson Middle School and South Gate.

DTSC Response 1n

The main objective of DTSC is to protect public health and the environment. Based on evaluation of the proposed mitigation system design, DTSC is confident that the proposed system will be protective for school children and all other members of the school community. DTSC will be closely involved in the further development of the system design for the school and will provide oversight throughout installation and on-going Operation and Maintenance activities.

Public Comment 1o

Exhibit # 136, LAUSD Inspector General's Report, 11/27/96, Inter-office correspondence, LAUSD, TO: MEMBERS, BOARD OF EDUCATION, FROM: SIDNEY THOMPSON, SUBJECT: METHANE GAS DECTION SYSTEMS/SCHOOLS WITH ABANDONED & ACTIVE OIL WELLS
"Currently there are 12 existing schools with known abandoned oil wells. The Belmont Learning complex has approximately 16 abandoned and 5 active oil wells."

Exhibit # 338, May 9, 1990, Inspector General's report should be heeded. This is a letter from an attorney representing the LAUSD to the general counsel of LAUSD.
"They presented a bleak picture of the Temple/Beaudry site.
1. The old Los Angeles Oil field runs through the site. There are 13 known abandoned wells and one currently producing well. DOG suspects that there may be dozens more unmarked abandoned wells dating back over 100 years.
2. Alternative First/Beaudry has has only one known abandoned well and is actually outside of the oil field as is the Crown Hill site.SP appears to have intentionally misrepresented the existing conditions on the First/Beaudry site.
3. The shallowness of the oil field means that there is a substantial likehood of one or more of the following conditions arising:
a. a large pressurized build-up of natural gas and/or oil could occur if the site is covered by structures and concrete. Seepage of oil is likely and the threat of a natural gas induced explosion is as likely here as in the Fairfax area.
b. If the one producing well is shut down and abandoned, the likely result will be re-pressurization of the oil field with consequences as in "a" above.

c. Many bootleg wells (i.e., uncharted) exist on the site and may never be discovered even during grading. Thus a dangerous condition will remain.

d. There are natural gas problems which will require venting and perhaps even flaring.

e. DOG suspects that petroleum operations involving hazardous materials may have been conducted on the site many decades ago. The likelihood of serious contamination is high.

f. The proximity of hydrocarbons made this area a heavy industrial site fifty years ago.

4. Mr. Baker of the DOG made the following observations (in which Manley Oil concurred):

a. This is the most troublesome and problematic oil field in the entire county.

b. The Temple/Beaudry site is not fit for any construction.

c.DOG cannot imagine a worse site for a school.

d. The City has refused to even address the issue in the Central City West specific Plan.

e. DOG insists that no structure should be built over a well.

f. the maintenance of the existing producing well requires full access by tanker truck.

g. There are four known abandoned wells between Court and Angelina streets and nine known abandoned wells between Angelina and Temple Streets. The producing well is 35 feet south of Boylston between Angelina and temple.

h. the minimum cost of re-abandonment is $45,000.00 per well with a possibility of the cost exceeding $100,000.00 per well. The total cost is not currently quantifiable because of the likely large amount of bootleg wells."

DTSC Response 1o

Please see DTSC Response 1k above which explains the current DOGGR standing regarding re-pressurization of the oil field.

Several field investigations have been conducted at the Site to locate former oil production wells. These investigations have involved geophysical surveys and exploratory trenching. In 2002, an extensive geophysical magnetometer investigation (Meredith & Associates, 2002) was conducted to identify abandoned oil wells and subsequently re-abandon them under the oversight of DOGGR.

In addition, the four (4) adjacent ("Toluca") oil wells operated by the LAUSD were properly abandoned under DOGGR oversight in 2003. The only remaining well near the school, LAUSD #1B, is used for monitoring the pressure of the reservoir (not for oil production).

Public Comment 1p

It is impossible to put in an adequate gas barrier system for a high school when 70% of the buildings have already been constructed even if you place a methane barrier over the existing slab and pour another slab. You will never be able to account for gas seepage up the walls.
The passive system being proposed is a joke. There is no written guarantee that the membrane won't leak. The groundwater is so shallow under the buildings at First and Beaudry that no methane barrier would be immune from flooding.

You are the only agency left to stop this horrible nightmare. The District Attorney, City Attorney and Attorney General have washed their hands on the Belmont Learning Complex.
LAUSD did also. They changed the name of the site hoping the public would forget about the Belmont Learning Complex and think about Central High School #11.

DTSC Response 1p

The passive/active gas mitigation system being proposed is in compliance with or exceeds the City of Los Angeles methane mitigation requirements. These building requirements have proven effective at hundreds of sites in the Los Angeles area. The idea that the membrane alone will provide an absolute guarantee against leakage is not realistic. However, a gas mitigation system relying on multiple redundant elements to prevent gas from moving into the building coupled with a strong monitoring program provides a high level of confidence that the system will be effective.

The proposed system contains gas venting and a membrane as the primary protection scheme. A strong Construction Quality Assurance Plan will be implemented to assure that any potential leaks in the system are discovered and repaired during construction. A redundant air sweep system will also be installed below the membrane. Once construction is completed, continuous gas monitoring will be conducted below the membrane to ensure passive system is removing any accumulated gas. If gas concentrations exceed 10% of the lower explosive limit, the redundant air sweep system will be activated to move any accumulated gas out to the vent system. In addition, the building ventilation system will automatically come on and an alarm will sound alerting school personnel of the need for further investigation or monitoring. The Operation and Maintenance Plan will also require 1) periodic monitoring of gas levels in vent risers and building space to ensure the system is functioning correctly and 2) periodic testing of gas detectors or other system components to ensure they are in good working order and functioning correctly. Thus, the proposed remedy relies on a system of multiple protection elements which when taken in whole, provide a high level of confidence that the system will be effective.

With regard to “gas seepage” up the walls of the proposed raised floor slabs, SCS Engineers is addressing this concern and has submitted detailed construction drawings that describe how the walls will be sealed to prevent gas seepage. These drawings are part of the Remedial Design package which will include a comprehensive Construction Quality Assurance Plan that sets forth the construction specifications regarding testing, monitoring, and inspection procedures during and following construction of the gas mitigation system.

During the Remedial Design phase, dewatering or drainage features are included to ensure the gas mitigation system is not compromised by high groundwater levels. With regard to shallow groundwater at First and Beaudry, the building located there is the parking garage, which has an existing concrete slab. The proposed gas mitigation system for the parking garage does not include the installation of subsurface pipes or a methane barrier. Rather, mitigation of the parking garage will include enhanced mechanical ventilation at a rate of six exchanges per hour, which is a 50% increase over the air exchange rate required by the Los Angeles Department of Building and Safety. In addition, continual gas monitoring of methane and hydrogen sulfide will take place in the parking garage, and an alarm system will be in place to notify personnel in the case of gas detection. This area of the Site is outside the boundaries of the oil field, and subsurface gas concentrations have always been very low in this area. Because concentrations are low under the parking garage, and the fact that the parking garage is partially open to the ambient air, this proposed mitigation will be more than sufficient to prevent gas accumulation in the parking garage.

Public Comment 1g

On the internet, your agency claims the DTSC protects California and Californians from exposures to hazardous waste. Your fact sheet January 2005 Draft Remedial Plan for the Central High School #11 Environmental Investigation Update appears to indicate you are abdicating your responsibility and are going along with the dictates of the LAUSD. You indicate the potential health risks associated with being on the site can be controlled with the technologies described. How do you really know the future deadly effects of your approval to the folly of LAUSD?
Isn’t this an about face from the position of Hamid Saebfar on 7/15/99?
REVIEW OF THE DRAFT REMEDIAL INVESTIGATION REPORT FOR BELMONT LEARNING COMPLEX, DATED JUNE 25, 1999
“Of particular concern to DTSC are the following issues: Long term off-gassing from this oil field cannot be conclusively accounted for by the limited short term sampling data.
The Report does not evaluate the hazard posed by the pervasive methane presence in the subsurface, which is critical to understanding the Site risks at Belmont. The major issues identified in the human health risk assessment section of the Report were the potential for methane gas accumulation, resulting in explosive conditions, and the presence of hydrogen sulfide in the methane

gas. Methane was found throughout the site and several detections were reported."
"There is a large uncertainty surrounding the long-term off-gassing effects from the oil field. The limited sampling data included in the Report cannot account for chemical concentrations and exposure variations over time. The dynamic nature and unknown reserves of the oil field present the potential for additional releases of both methane and hydrogen sulfide. This uncertainty is of prime importance in evaluating the current and future safety at the Site."
"DTSC agrees with the Report recommendation that the current methane collection system for the site is not adequate for the newly re-classified high potential methane Zone. The passive methane collection system has major design and implementation flaws, particularly in regards to non-methane vapor or gases."
"The shallow ground water beneath the building area has been reported to have low levels of VOC and PAH contamination. The potential for vapors from this groundwater to infiltrate into indoor air must be evaluated in the risk assessment.

DTSC Response 1q

Based on its review of the Draft Remedial Investigation conducted by ESC in 1999, DTSC raised the concerns that there was not enough data to adequately assess the fate and transport of gases at the Site in the long term. With respect to this concern, DTSC required additional soil vapor sampling to assess gas concentrations at various depths at the Site, which was performed in Fall, 1999, Fall, 2002, and Fall, 2003. In addition, extensive geophysical studies were conducted at the Site to evaluate the potential for gases at these depths to move to the surface. These studies led to the current comprehensive understanding of gases and their movement at the Site that was not complete in 1999. Additional long term monitoring of gases will be conducted as required by the Operation and Maintenance Agreement between LAUSD and DTSC for the proposed mitigation system. For these reasons, the concerns raised by DTSC in review of the 1999 RI regarding uncertainty at the Site have now been addressed, and DTSC is confident that the proposed system, which includes both passive and active components, will be protective for school children and all other members of the school community.

Regarding impacts to groundwater from VOCs and PAHs, the RI prepared by Meredith & Associates in November 2003 contained previous groundwater data as well as additional data collected in 2002 and 2003. These data indicate groundwater impacts are limited to low levels of VOCs in the corner of First and Beaudry Avenue. Based on a human health risk assessment, these levels do not pose a threat to human health or the environment. Groundwater at First and Beaudry, both on the school property and off-site in the intersection will continue to be monitored until levels of VOCs decrease to maximum contaminate levels established by state and federal agencies.

Public Comment 1r

Why did Jennifer Jones, DTSC Project Manager, tell the public at the January 19th, 2005 meeting there is no methane gas under any of the buildings?
If Hamid Saebfar wrote in 1999 that methane was found throughout the site, where did the methane go?

DTSC Response 1r

DTSC agrees that methane gas is present in the subsurface across the Site, with the maximum concentrations occurring in the northeast (future baseball field area). Much lower concentrations of methane have been detected in the area of the buildings. According to the court reporter's transcript of the January 19th, 2005 meeting, Jennifer Jones stated "Methane is a gas that occurs naturally in oil fields. At the Central L.A. School 11, there were high concentrations found. Up to 900,000 p.p.m. or parts per million or per volume, were detected at a depth of 40 feet. That is in the baseball field, the area of concern in the northeast corner. 900,000 p.p.m., parts per million, is like saying you have a sample of gas and 90 percent of that gas is methane. And in the lower area of the future buildings closer to First and Beaudry were lower concentrations. 20,000 p.p.m. was the max there."

Public Comment 1s

Exhibit # 202, Inspector General's Report, 3/10/98, From: Sepich Associates/Methane Specialists, To: Ken Reizes, Kajima International
SUBJECT: BELMONT LEARNING CENTER METHANE
"We finished field monitoring last week. Combustible gas concentrations were found up to 35% by volume as methane, and hydrogen sulfide up to 192 ppm in the new probes south of Colton."
HAZARDOUS MATERIALS IN SUBSURFACE AND GROUNDWATER
"There exists the potential for soil impacts from subsurface petroleum deposits and for the presence of methane gas and hydrogen sulfide I the subsurface."
"Based on CAL-OSHA criteria, this drilling and construction project is designated as "potentially gassy". Under this classification, there is a possibility for the accumulation of explosive vapors or gases including methane. The possibility also exists at this location for the buildup of hydrogen sulfide gas, or the occurrence of an oxygen deficient atmosphere."

May I suggest you read the: YALE INSIDER SOUR GAS AND HYDROGEN SULFIDE on the internet.
"Hydrogen sulfide, the component of natural gas that makes it "sour", is a potent toxin. Exposure to gases containing hydrogen sulfide cause death quickly by respiratory paralysis at exposure above 500ppm of H2S. Levels between 100 and 500 ppm irritate the eyes and respiratory tract, and unconsciousness and death have been reported from prolonged breathing of 50 ppm, wrote Kaye H

Kilburn, MD in his book Chemical Brain Injury. “Computer tomography has demonstrated abnormal low density of the basal ganglia and surrounding white matter in chronic H2S poisoning.”
Even at lower concentrations, scientists have found significant health impairment. After a careful analysis of several studies of people exposed to ambient hydrogen sulfide, Dr. Kilburn concluded,

- “Subjects who were not made unconscious by H2S or whose exposure was even lower showed protracted impairment when the subjects were tested at intervals from months to years after exposure.
- “Exposure causing impairment occurred in environmental situations, downwind as well as in the workplace.”
- “The exposure did not have to be sub lethal to cause permanent ill effects.”

Journalist Andrew Nikiforuk describes in *Saboteurs* the impact of exposure to sour gas.” Breathing a good whiff of sour gas is like being winded and hit with hammers on both temples at the same time. Workers who have been knocked unconscious for more than five minutes by sour gas rarely lead a normal life. The gas can steal a man’s memory, cripple his lungs, leave him blind, erase his sense of smell, give him the shakes, weaken his heart, and induce psychotic nightmares. Men who have worked Alberta sour gas fields tend to age rapidly and look old before their time.
He goes on to say, “both industry and government argue that no conclusive body of scientific evidence supports the claim that small doses of H2S are harmful. Big Oil seems to be today where big tobacco was 15 years ago: deny, deflect, dismiss.
Alberta’s economy includes dependence on cattle ranching.” Hydrogen sulfide has an effect on cattle at a concentration less than 50 ppm and can cause death to cattle at higher concentrations. Sour gas has been associated with reproductive problems including miscarriages and stillbirths in livestock. The study went on to note that “behavioral effects, such as unwarranted aggression and estrous-like behavior in a large number of pregnant cows, poor mothering in post-partum cows, a failure to thrive in the calves and evidence of immune deficiency.”

Doctor Kaye Kilburn, MD, University of Southern California Keck School of Medicine sent me a fax notice of the NEW PROPOSED FEDERAL RULES FOR EXPOSURE TO HYDROGEN SULFIDE
The proposed new rule is 10,000 (ten thousand) times higher than the old rule.

<u>DTSC Response 1s</u>

DTSC and the DTSC Human and Ecological Risk Division share the concern raised by Dr. Kilburn and others that hydrogen sulfide can produce a number of adverse health effects, including chronic exposures in the low parts per million (ppm) range. The proposed gas mitigation system for the school is designed to

be protective down to levels for hydrogen sulfide orders of magnitude lower than those referenced in Public Comment 1s above. While DTSC recognizes that occupational standards are generally in the ppm range, the goals for students and faculty are in the lower part per billion (ppb) range. The proposed indoor level is 10 ppb, which is 1000 times lower than the occupational standard of 10 ppm. The levels for the proposed gas mitigation system have been set using the Reference Exposure Levels (RELs) for inhalation developed by the Office of Environmental Health Hazard Assessment (OEHHA) in CalEPA. These goals consider both short as well as long term low level exposures to hydrogen sulfide. The OEHHA RELs are as low (or lower) than other environmental standards and are the most protective of human health.

Public Comment 1t

What does it take for the DTSC to stand up to the LAUSD and tell them that they made a big mistake when they decided to build a high school over the former Los Angeles Oil Field that will cost over a half of a billion dollars when completed without a guarantee that it will be free of deadly hydrogen sulfide and explosive methane gases.
LAUSD is building three other high schools within a one mile radius of the Belmont Learning Complex. None of the other sites are over a former oil field. The buildings on site of the Belmont Learning Complex should be razed and turned into a park so that the hydrogen sulfide and methane gases can escape to the air without the “footprint” of the constructed buildings trapping the gases.

DTSC Response 1t

School Districts go through a complicated process to meet the requirements of the California Department of Education to select proposed school sites. The role of DTSC is to oversee the environmental investigation and cleanup of proposed school sites with the mission of protecting public health and the environment. DTSC is fulfilling its role at this Site through oversight of the comprehensive Remedial Investigation and Feasibility Study and Remedial Action Plan process.

Public Comment 1u

LAUSD has demolished two buildings on the site because DTSC stated an earthquake fault was discovered in 2003.
This is another example of DTSC stretching the truth. The earthquake fault was discussed in the previous geology report by Law Crandall in 1997. It was well known during the investigation by the LAUSD Inspector General and by the Belmont Task Force that LAUSD and the developer had knowledge of an earthquake fault under the site. The excuse now is because a large amount of the hillside was cut and compacted under the buildings constructed over the fault required that two buildings be demolished. Who is responsible for the waste of at

least $50 million dollars of taxpayer money to demolish the two 70% completed buildings?

DTSC Response 1u

Prior to the geotechnical study conducted by Earth Consultants International in 2003, the presence and activity of the earthquake fault had not been confirmed. The ECI study mapped the fault and concluded that, because the Site surface was disturbed during construction, the fault should be considered an active fault. Under state law, no buildings can be located within 50 feet of an active fault. Thus, two of the existing buildings located in this zone were demolished in order to protect school children and staff from the potential earthquake activity. Please note that the California Division of State Architect (not DTSC) has regulatory authority to review and approve the construction of the school buildings. DTSC authority applies only to construction of the gas mitigation system.

Public Comment 1v

At the January 19th meeting, DTSC stated before 2000 there were no environmental regulations regarding schools. This is totally false. California Health & Safety Code covers the illegal transportation and disposal of hazardous waste. Drilling muds and waste oil pits are presumed hazardous waste. Serious contamination had been found at the site. LAUSD in an effort to save money and hide the fact they purchased a hazardous waste facility (an oil field), did not oversee the proper testing of contaminated soils.
If you don't perform the proper tests, you won't find the true results.
LAUSD did not have to account to anyone prior to DTSC awaking from its 8 year slumber.

DTSC Response 1v

The reference to environmental regulation of schools beginning in 2000 refers to the fact that school districts were not required to obtain approval from DTSC of a proposed school site with respect to environmental contamination until revisions to California Education Code became effective in January, 2000. Prior to 2000, DTSC still had authority, as it does now, to oversee the proper disposal of hazardous waste if it is discovered during development of a property. However, during construction of the Belmont School in the 1990s, DTSC was not made aware of any illegal disposal of hazardous waste from the Site. The Los Angeles District Attorney's Office conducted an extensive and thorough investigation of potential violations of law related to this Site, and has declined to pursue legal action.

Public Comment 1w

I ask you to rethink your position regarding permitting LAUSD to complete this project.
Your personnel at the meeting indicated that landfills have no problem with a membrane lining. Landfills contain discarded waste material.
Does DTSC equate the students at a high school with a landfill as discarded waste material?

DTSC Response 1w

DTSC's highest priority is protecting the health of school children. DTSC has established stringent standards with regard to exposure and health risk at proposed school sites. At the meeting, DTSC was simply drawing useful comparisons to gas mitigation systems at landfills that use some of the same engineering technologies as the proposed gas mitigation system for the school.

Public Comment 1x

Have you thought of the potential liability in the future from students suffering the poisonous effects of hydrogen sulfide gases? You might claim immunity from suit because you are a state agency but a judge might rule against you because you should have known better and let a jury award injured students and faculty millions of dollars. You have never before permitted a school district to build a high school over an unstable and troublesome oil field in Los Angeles County. Why did you approve an active gas removal system for Banning School and a passive gas removal system for the Belmont Learning Complex? Is it because the passive system costs 9 million dollars and the active system would cost 17 million dollars. You know LAUSD does not want to spend the money for the more costly system. The truth is neither system is adequate to protect the health of the schoolchildren, faculty and support personnel.
Please do not permit the future students, faculty and support personnel to be the canaries of the future to warn of the impending eventual disaster.

DTSC Response 1x

The gas mitigation system at Banning is very similar to that proposed for this Site: a passive system with an active air sweep component. Both are protective of public health due to redundant safety measures, including the use of gas barriers along with passive/active vent pipes, ventilation enhancement, and a continual gas monitoring system. These systems are more stringent than those required by the Los Angeles Department of Building and Safety for residential housing built over the same oil field. DTSC approved these systems because they are protective, not because of cost. The process by which the proposed system at the Belmont Site has been reviewed by DTSC is in accordance with all state and federal regulations and would be clearly substantiated in a court of law.

Public Comment 2

I have been concerned about construction of Belmont Learning Center high school #11 on the Temple-Beaudry oil well site for several years. A few years ago the concrete tunnels for the west running Los Angeles subway traversing this site were wrapped with plastic and yet hydrogen sulfide made workers sick in tunnels and at stations.

The Belmont site leaks hydrogen sulfide and methane to the surface in quantities measured at 375 parts per million (ppm). Dangerous levels for causing permanent damage to the human brain can be as low as 1 ppm.

It is essential to prevent exposure of school children and teachers. A catastrophic exposure should not be needed as the call to action. But it will come if the completion of Belmont High School #11 is not prevented. Avoidance is the sane answer and it forestalls damaged people, rendered demented and liability in the future.

DTSC Response 2

DTSC and the DTSC Human and Ecological Risk Division share the concern that hydrogen sulfide can produce a number of adverse health effects, including chronic exposures in the low parts per million (ppm) range. The proposed gas mitigation system for the school is designed to be protective down to levels for hydrogen sulfide orders of magnitude lower than those referenced above. While DTSC recognizes that occupational standards are generally in the ppm range, the goals for school for students and faculty in lower parts per billion (ppb) range. The proposed indoor level is 10 ppb, which is 1000 times lower than the occupational standard of 10 ppm. The levels for the proposed gas mitigation system have been set using the Reference Exposure Levels (RELs) for inhalation developed by the Office of Environmental Health Hazard Assessment (OEHHA) in CalEPA. These goals consider both shorter as well as long term low level exposures to hydrogen sulfide. The OEHHA RELs are as low (or lower) than other environmental standards and are the most protective of human health.

With regard to the statement that “the Belmont Site leaks hydrogen sulfide and methane to the surface in quantities measured at 375 parts per million (ppm),” DTSC has not found this to be accurate. Hydrogen sulfide has never been detected at the surface on the Site. Nevertheless, the proposed gas mitigation system will prevent hydrogen sulfide from reaching levels above the 10 ppb level explained above.

Public Comment 3a

After reading the 1200 pages from Komex hidden from the LAUSD Board of Education and the public by the superintendent’s office I discovered in these

documents the DTSC Public Participation Manual. After reading this manual I discovered that DTSC had not followed very much of their own rules, why?

DTSC Response 3a

DTSC has complied fully with the guidelines of the DTSC Public Participation Manual for this Site. DTSC has a comprehensive Public Participation Plan for the Site based on community interviews, surveys, and other research tools to understand the demographics and communication needs of the community. The extensive public participation efforts at the Site have included the publication and distribution of information fact sheets sent to over 12,000 addresses in the school and residential community and to other interested individuals. The fact sheets were in English and Spanish, and Mandarin and Korean translations were sent to those who requested these languages in a community survey. In addition, 250 email fact sheets were sent to an email list of interested parties. DTSC has met several times with elected officials of the area, with local community groups, students, and teachers. DTSC is always available to answer calls and meet with the community regarding the Site. DTSC has hosted three formal public meetings since 2003 to present the RI/FS, Vista Hermosa Park RAP and the school RAP to the community and address their questions and concerns.

Public Comment 3b

Also, included in these documents were the insurance bids. They were more than $90 million dollars. Why is this never presented to the public and has your agency ever seen any of these Komex documents to which I am referring? And if not how can you go ahead with this project?

DTSC Response 3b

DTSC is aware of the KOMEX proposals. However, DTSC is not involved in the purchase of insurance for property owned by the LAUSD.

Public Comment 3c

Ann Valenzuela-Smith told us that a CD-ROM, which we were presented, had all of the information presented to the district from the three bidders. At a facilities committee meeting Board member Tokofsky asked Mr. Tony Brown from Komex if the book, which he was holding up, was all of the information presented to the district, Mr. Brown said that it was not that there was an even larger supplemental book. At the end of the meeting several others and I proceeded to the superintendents office and I demanded from Miss Valenzuela-Smith the documents promised but missing. She came out of an office with a large stack of documents in her hands and said that she needed a $1,000 dollars for the printout. The superintendent's office had in the meantime called the LAUSD Police and 8 or so officers arrived. They asked me what the problem was and I

explained. The lead officer then went over to Miss Valenzuela-Smith took the documents out of her hands and handed them to me and asked if I was satisfied and I said yes. Why did this happen and what else is hidden?

DTSC Response 3c

DTSC has no knowledge or involvement in the activities described in the comment.

Public Comment 3d

Why was the 1991 O'Melvany and Meyers letter from David Cartwright ignored?

DTSC Response 3d

All information pertinent to the environmental investigation of the Site was reviewed and considered by DTSC.

Public Comment 3e

Manley declared in that time period that the pressures had cracked an 18" reinforced concrete slab, how much pressure does that take?

DTSC Response 3e

This statement refers to a crack that developed as a result of oil production activities at a property managed by Manley Oil. This property is located north of the school site, not on the school site itself. As described in DTSC Response 1k above, various studies have determined that the Los Angeles County Oil Field is not under pressure, and there are no oil production activities being conducted on the school site.

Public Comment 3f

Hamid Sabfir as a representative of DTSC during the Belmont Commission hearings that it was position of DTSC that it would require $27.5 million for a single layer gravity extraction system under the entire project to remediate the situation. The Belmont Commission science team stated that it would take a $65 million dual layer, vacuum extraction system with carbon filters. I predicted that it would be $100 million by the time that it was finished. Scott Wildman, former chairman of the Joint Legislative Audit Committee, stated to me that the estimated cost had passed $100 million just before former speaker of the Assembly Bob Hertzberg threw him out of the chairmanship.

DTSC Response 3f

DTSC did not provide any cost estimates for remediating the Site. In accordance with the RI/FS process, cost estimates were provided by LAUSD and their consultants during development of the Feasibility Study. Any cost estimates developed prior to the FS were based on the fact that characterization of the Site was incomplete at that time. Subsequently, the RI/FS conducted at the Site provided extensive characterization of the fate and transport of gases. Based on that information, the proposed passive/active gas mitigation system presented in the RAP is fully protective of public health.

Public Comment 3g

Roy Romer told me and the Belmont moms, as they were known, that he would meet with they and with our science experts. He has met with them many times. He has never met with our science experts and has in fact threatened me with arrest many time for pushing him to keep his word, why?

DTSC Response 3g

DTSC has no knowledge or involvement in Roy Romer's activities.

Public Comment 3h

Despite repeated requests DTSC has repeatedly refused to tell the general public most of the facts which are on the record, why?

DTSC Response 3h

This statement is false. As stated in DTSC Response 3a above, DTSC has made extensive efforts to communicate the facts to the public. Information fact sheets contain general information about a site. In some cases, individuals may wish to see additional, detailed information. Technical documents associated with the project have always been made available for the public to view at any of the listed repositories. In addition, LAUSD has voluntarily posted many of the documents on its website (www.laschools.org/vista-hermosa). As a public agency, DTSC files are available for the public to review by contacting the DTSC Glendale Office File Room at (818) 551-2886.

Public Comment 3i

What is the response of DTSC to the interviews of many of the principal players by Leslie Dutton of the Full Disclosure Network, as someone is certainly not telling the truth?

DTSC Response 3i

DTSC was not asked to participate in the Full Disclosure Network program. DTSC has responded to public comments received from participants in the program herein.

Public Comment 3j

What is the DTSC response to Anthony Patchett, formally chief investigator for the District Attorney on the Belmont situation? After all his position was that there was certainly good reason for a grand jury investigation to be enjoined and indictments to be handed down for trial. Please read his letter to the head of DTSC.

DTSC Response 3j

Mr. Patchett's comments are included in the public comments presented herein, along with DTSC responses.

Public Comment 3k

What is your response to the letter to the head of DTSC from Dr. Kaye Kilburn? Dr. Kilburn is a world recognized expert in chemical brain injury and in the effects of H2S. In fact the federal government is now considering seriously raising the limitation of exposure to H2S. This has never been stated by DTSC in public even after this information was made public.

DTSC Response 3k

Dr. Kilburn's comments are included in the public comments presented herein, along with DTSC responses. As stated above, the proposed gas mitigation system for the school is designed to be protective down to levels for hydrogen sulfide orders of magnitude lower than the referenced federal standards.

Public Comment 3l

At the Hayden hearings on Belmont at the State Building downtown the DTSC geologist flown down from Sacramento stated that he did not know what happened below 500 feet. This is expertise? All of your supposed experts seem to be people with only bachelor's degrees and they are unpublished in any peer reviewed journal. Why?

DTSC Response 3l

As explained in Response 3f above, at the time of the Hayden hearing characterization of the Site was incomplete. The Schlumberger study, conducted

at the Site in 2002, provided information about the Site extending to a depth of 1500 feet below ground surface. The DTSC team has a combined 100+ years of experience in the field of environmental investigation. Nearly all of the DTSC staff involved in this project have advanced degrees and many peer-reviewed journal articles.

Public Comment 3m

What is the DTSC response to the letter commissioned by Ira Reiner, former District Attorney of LA, and member of the Belmont Commission from Walter Lack, esq. Mr. Lack is a nationally recognized attorney and he laid out how the district could be sued for large sums for damages from H2S?

DTSC Response 3m

DTSC has no knowledge or involvement in how the district could be sued.

Public Comment 3n

Why has DTSC consistently refused to tell the public the hard facts of the effects of H2S on both humans and animals? This is well documented and the effects of H2S do not seem to reverse and they can cause permanent damage in small amounts. The LAFD has sniffed as much as 350ppm at the Belmont site. That much can kill you.

DTSC Response 3n

Hydrogen sulfide has never been detected at the surface at the Belmont site. Hydrogen sulfide detections by the LAFD have been limited to locations of oil wells, to the north of the school site. Please see DTSC Response 2 above for information regarding exposure levels for hydrogen sulfide at the school site.

Public Comment 3o

Is DTSC in the high-risk business with our children and their future?

DTSC Response 3o

DTSC's mission is to protect public health and the environment. Protecting the health of school children is the highest priority.

Public Comment 3p

How can DTSC say that the public process is finished when you do not even know what the final plan is to be yet?

DTSC Response 3p

DTSC has conducted extensive public participation efforts during the course of the environmental investigations and development of a remedial alternative for the Site. Most recently, DTSC presented the Draft RAP to the public for input. DTSC considered all public comments received and has presented responses herein. Although the public comment period is now complete with the approval of the RAP, the public participation process is ongoing. DTSC is committed to public participation and will continue to keep the public informed during implementation of the RAP. As a public agency, DTSC is available to respond to questions and concerns, and DTSC files are available for public review.

Public Comment 3q

For instance, how are you going to seal the buildings and their walls?

DTSC Response 3q

Please see DTSC Response 1p above.

Public Comment 3r

How about the water table which comes to the 1-foot level in certain areas?

DTSC Response 3r

Please see DTSC Response 1p above.

Public Comment 3s

You seem to be in denial that these gasses are driven by water and when H2S is with water it forms sulfuric acid.

DTSC Response 3s

Please see DTSC Response 1k above, citing a letter in which DOGGR states the reservoir is not water-driven.

DTSC is aware that the presence of hydrogen sulfide can form a dilute mixture of sulfuric acid in water. Based on the proposed mitigation system, there are no potential engineering problems associated with this that reduce the effectiveness of the proposed system. During the Remedial Design phase, dewatering or drainage features are included to ensure the gas venting system will not be compromised by water. Furthermore, materials for the components of the venting and monitoring systems will be carefully evaluated to ensure they provide long-term resistance to the corrosive effects of sulfuric acid.

Public Comment 4a

Hamid Saebfar falsely informed the public that LAUSD brought the issues of the BLC site to DTSC. Mr. Saebfar failed to inform the public that LAUSD was forced to review the site due to Assemblyman Scott Wildman's JLAC investigation of the site. This failure to inform the public of LAUSD's true role misrepresents LAUSD as being properly safety conscience and an entity to therefore place one's trust for future oversight of gas mitigation at the BLC.

DTSC Response 4a

Please see Response 1a above. In addition, please recognize that DTSC will have on-going oversight authority over the Operation and Maintenance activities at the school site.

Public Comment 4b

Hamid Saebar failed to disclose that the LAUSD TOLUCA oil wells, which for years spewed toxic fumes into the school site area and the surrounding community, were not shut down from the toxic spray until Grassroots Coalition, a purely public and independent entity, brought in the AQMD who forced LAUSD to stop the toxic emissions of the Toluca wells. Mr. Saebar failed to disclose that GC had, for years, requested both DTSC and LAUSD to intercede and stop the emissions from the toxic LAUSD Toluca oil wells. The failure of DTSC to reveal the true story of DTSC's and LAUSD's inaction to safely protect the public from the toxic emissions from the Toluca wells furthers DTSC's mischaracterization of both itself and LAUSD as entities that deserve the public's trust.
The public deserves to be delivered the truth in order to make informed decisions. DTSC has failed to deliver the truth.

DTSC Response 4b

The Air Quality Management District is responsible for issuing permits and overseeing emissions of oil production wells. DTSC does not have regulatory authority to oversee these operations.

Public Comment 4c

The DTSC team stated and thus, led the public to believe that all past data had been included in their decision making process when, in fact, the prior data was not assembled and compared with the more recent testing done since the Blue Ribbon Commission hearings. DTSC has failed to allow the public to make an informed decision and has falsely told the public that the earlier data is acknowledged and compared in their RAP. This deception is very dangerous and false.

DTSC Response 4c

The Remedial Investigation/Feasibility Study is a comprehensive study that includes all data that were collected with DTSC oversight and rigorous Quality Assurance/Quality Control (QA/QC) measures in place. Data upon which regulatory decisions are based must be generated according to appropriate scientific methodologies and must meet clearly defined data quality objectives. Appropriate QA/QC measures were instituted at the Site during the 1999 Remedial Investigation and have been in place during all subsequent investigations under DTSC oversight. Thus, the RI/FS, upon which the RAP is based, includes these data collected from 1999 to the present.

Public Comment 4d

DTSC makes no mention of the higher water table of the BLC site during normal and heavier rains. DTSC provides some information regarding H2S and methane hazards at the site but DTSC fails to provide oversight and fails to alert the public that LAUSD has no NPDES PERMIT to pump groundwater from the BLC site.

DTSC Response 4d

Information regarding groundwater levels at the Site is readily available in the RI/FS, a public document which can be reviewed at the DTSC office and on the LAUSD website.

Regarding the NPDES permit, see DTSC Response 4e below.

Public Comment 4e

DTSC fails to alert the public that the BLC site has only a construction/storm water runoff permit. This failure to inform and provide proper lead agency oversight signals more failure to perform informatively (transparently) and safely in future activity at the BLC site. Groundwater does exist at the site as revealed in LARWQCB data on the site and the earlier studies left out of the RAP and pumping of water from the loading dock (sump pump-groundwater) area is occurring during rainy weather and dry weather, weeks after rains have stopped.

Where is the DTSC oversight? The LARWQCB data reveals that a NPDES permit was applied for by LAUSD and was not given by the LARWQCB. Toxics aside, the groundwater has high TDS (total dissolved solids). Why has the DTSC not provided the lead agency oversight to compel LAUSD to do whatever is necessary to have its pumped out groundwater be under an NPDES permit?

DTSC Response 4e

As noted in the comment, the Los Angeles Regional Water Quality Control Board (LARWQCB) has responsibility for the issuance of construction/storm water permits and NPDES permits. DTSC is aware that the LAUSD has a Storm Water Pollution Prevention Plan (SWPPP) for the Site. The SWPPP is reviewed and updated regularly to ensure that appropriate storm water diversion, containment, and management are maintained.

DTSC is aware that following some rain events, water has been pumped out of the loading dock area. DTSC requested LAUSD test the water for contamination prior to disposal. DTSC staff has overseen testing of the water and reviewed data that indicate the water is not contaminated (including both levels of chemicals of concern and total dissolved solids) and is within acceptable ranges for discharge to the municipal storm sewer system. During a majority of the year (summer, spring, fall), no water is discharged from the Site. The discharge of accumulated water from the loading dock and at the corner at First Street and Beaudry Avenue during or after winter storm events is a temporary condition until the sub-floor drains are connected to the storm sewer as indicated in the project plans and in accordance with regulatory requirements.

Please also note that extensive sampling of groundwater on the Site during the RI has found that groundwater beneath the site is non-hazardous and requires no further action at this time.

Public Comment 4f

DTSC failed to inform the public of the vast differences in heightened danger regarding landfill mitigation vs oilfield mitigation. Why did DTSC use landfill comparisons of mitigation without disclosing the enormous differences of danger? That being, that oilfields, which drive the toxic emissions upward into or around any mitigation systems are far more complex and have a much higher degree of difficulty to perform and perform safely over the lifetime of a project (70yrs+). The DTSC has been provided and should have provided the public with the lengthy data that reveals the lack of effectiveness and failures of gas mitigation systems, including the HDPE failures in the hydrocarbon environment as well as in landfills. The public is, once again entitled to not have the truth be whitewashed. DTSC's failure to provide the safety record of the various mitigation items that were lightly discussed by DTSC at the RAP hearing reveals DTSC's real lack of proper investigation and accordingly DTSC's inability to provide the public with the truth. By way of just one very simple example:

Why was rain -water infiltration of gas intake pipes not discussed regarding the ball field area. Flip discussions of material wrapped gas intake pipes shutting out sand infiltration of the pipes leaves DTSC looking like buffoons when clearly, common sense alone reveals that when it rains, water moves into the near surface soils wherein the gas intake pipes reside. Water provides clogging through dissolved solids and bacterial growth….. Mr. Saebfar, along

with Mr. Watson (LAUSD) kept stating that the mitigation systems were not thoroughly worked out yet, the rest of the DTSC team kept up the nonsensical reassurances of having the mitigation systems worked out and under control, thus the team was able to place a finite 8 million dollar price tag to the mitigation systems.

DTSC Response 4f

Please see DTSC Response 1w above regarding the comparison made between landfill mitigation and oilfield mitigation.

Regarding failure of the HDPE membrane, please see DTSC Response 1p above.

At the January 19, 2005 public meeting for the RAP, DTSC staff responded to two questions regarding what would keep sand or other particles from clogging up the gas intake pipes. According to the court reporter transcript of the meeting:

Question1: “What is the schedule for the pipes that they are planning to use for the mitigation problem, the tubes? What are the size of the holes? What is the maintenance procedure to keep the sand from filling in, then?”
Question2: “My business is law, not engineering, but I don't understand how, if you put a membrane around the pipes, whether it's the air pipe or the collection pipe, fine particles of sand are going to fill any membrane. How are you going to have the inter-flow of gas and air if you wrap the collector pipes and the air pipes with a membrane that supposedly can keep out fine particles?”

No question was asked regarding rainwater infiltration of gas intake pipes in the baseball field area during the meeting. The answer to that question is that the system design includes a water drainage system above the gas pipes to divert irrigation water as well as rain water from entering the sand layer or gas pipes below. The playfield areas will have 18 inches of soil above 18 inches of sand. The water drainage system will be located in the soil layer above the sand.

Public Comment 4g

The DTSC team reassured the public that the methane was only on the NE side of the property. This hardly is credible when the Daily Breeze has a front page photo devoted to revealing gas bubbling up in the SW side of the property. I am in the Daily Breeze photo and witnessed the gases bubbling to the surface. DTSC and LAUSD are perpetrating the false impression that the gas has disappeared. Why hasn’t DTSC included the earlier data and why hasn’t the DTSC had the proper oversight to make sure the site is studied under normal or heavier rain conditions?

DTSC Response 4g

DTSC has no knowledge of the Daily Breeze photo. However, since the southwest of the Site is covered with soil and vegetation (not liquid or semi-liquid), it is not feasible for methane to visually "bubble up" on the Site as the comment indicates. Neither methane nor hydrogen sulfide has been detected at the surface of the Site.

Regarding studies of the Site under normal or heavier rain conditions, please see DTSC Response 1m above.

Public Comment 4h

Why did DTSC whitewash the hazards of hydrogen sulfide (H2S)? During the RAP hearing the DTSC marginalized low level emissions as possibly causing throat irritation and headaches. Why didn't DTSC investigate and provide the readily available safety data regarding permanent brain damage due to chronic low level emissions of H2S? DTSC's role is to provide the pros and cons of an issue. It appears DTSC has gone out of its way to not disclose data.

DTSC Response 4h

Please see DTSC Response 2 above.

Public Comment 4i

DTSC fails to provide any follow up data from sites with oilfield gas mitigation, while simply saying sites exist and are safe. This is not the behavior of a properly behaving EPA agency. Please provide the data. The City of Los Angeles was confronted at various public hearings regarding the need to provide followup data regarding gas mitigation sites. The City was not able to provide the data because the City does no follow up. The total lack of evidence provided by DTSC provides the true reality of DTSC's lack of proper oversight of the BLC site and the public's well being.
DTSC claims that it has the jurisdiction to provide the approval or disapproval of the BLC site and systems yet the DTSC balks when liability is brought up by the public and tells the public that LAUSD has the liability.
This makes no common sense. It makes for a dodge that DTSC is hiding behind in order to give a go ahead on a site that has no actual plan.

DTSC Response 4i

Gas mitigation systems are in place over oilfields throughout the City of Los Angeles and surrounding areas. Two examples of large-scale methane gas systems include Hoag Hospital, located in Huntington Beach, and the Farmer's Market/Grove Shopping Center in the Fairfax District of Los Angeles. These

systems include methane sensors and alarms requiring periodic monitoring for methane and/or hydrogen sulfide. This monitoring is typically conducted by the engineering company that designed the mitigation system. SCS Engineers, located in Long Beach, California, is the engineering company that designed the proposed gas mitigation system for the Belmont School site. They have a great deal of expertise in this area and can provide monitoring data from several sites with similar systems. In addition, the local fire department has responsibility to respond if a methane and/or hydrogen sulfide alarm is triggered in these systems. The fire department should be contacted for information about any such incidences.

Regarding liability, LAUSD, as the Site owner, is legally liable for the Site. The California Department of Education (not DTSC) has the authority to approve proposed school sites. DTSC, as lead agency, is responsible for complying with all state and federal laws regarding environmental review of the proposed school site. DTSC has fully complied with these laws, and will continue to comply by providing ongoing oversight of the gas mitigation system through a legally enforceable Operation and Maintenance Agreement between LAUSD and DTSC.

Public Comment 4j

In conclusion, because the site is so controversial, GC believes that the DTSC should apply its public participation program throughout the entire process of creating mitigation for the BLC site. It is the only way to spend public dollars with any chance at even vague accountability and the only way to allow the public even vague insight into what their children will be forced to attend.

DTSC Response 4j

Please see DTSC Response 3p above.

Public Comment 5

Contact several surety insurance companies and the proposed contractors and see if a Surety Bond can be placed to transfer liabilities from the Board to the developers and contractors; a valid concern, as printed, that David Tokofsky raised.

Review the original “Soil” reports, etc., and see which contractors and or developers said what during the original process; and then see what Surety Bonds were purchased, if any, that might cover the ongoing issues we were made aware by you and others at the Daily News, during this prior time period.

DTSC Response 5

LAUSD, as the Site owner, is legally liable for the Site. DTSC does not have information or involvement in LAUSD insurance policies.

Public Comment 6

The proposed school and now also a "proposed park" to be located at the corner of First Street and Beaudry Avenue, downtown Los Angeles, California by Los Angeles Unified School District CAN NEVER BE A SAFE SITE FOR A SCHOOL. The total waste of education funds for the State of California school districts and California school children's education funds is a never ending problem for all interested in educating California's school children.

Approximately 1988-90 the original site for the BLC high school at the AMBASSADOR HOTEL SITE approved by the community was politically moved by the Los Angeles Unified School District (LAUSD) to the First Street/Beaudry Avenue/Temple Street site without input or approval of parents and community. Up to date 2005 both sites have lost without a school built at either site:

1. Ambassador Hotel site: Donald Trump lawsuit over $100 Million Dollars. Public has not been made award of the amount lost at the hotel site because of the lawsuit and LAUSD politics since 1988-89.

2. Belmont Learning Center (First Street/Beaudry Avenue/Temple Street): BLC site with dangerous amounts of hydrogen sulfides and methane gases on an EARTHQUAKE FAULT (ACTIVE) has lost to date 2005 over $200 MILLION DOLLARS without a school built and the problems started 1988-89.

AREA RESIDENTS for the First Street/Beaudry Avenue/ Temple Street community which includes the BLC school site have NOT BEEN EDUCATED regarding the problems with HYDROGEN SULFIDE AND METHANE GASES! As a resident living 700 yards from BLC school site at (address omitted for privacy) have not been notified of the highly dangerous migration of hydrogen sulfide and methane gases into the surrounding neighborhood. EXAMPLE OF 1563 ROCKWOOD STREET WAS ORDERED VACATED BY THE CITY OF LOS ANGELES BECAUSE OF METHANE GAS BUILT UP AND EVENTUALLY DEMOLISHED (L.A. TIMES ARTICLE). The excavation and removal of over 40 feet of dirt on the First Street/Beaudry Avenue side of BLC site has changed the flow of gases in the immediate area without consideration of the danger and health of the area residents.

Having lived at (address omitted for privacy) since 1939 with no methane gas problems so long as the active oil wells in the immediate area of BLC school site were pumped of their oil. The BLC school site has five (5) active oil wells and according to reports sixteen abandon oil wells (not cap according to City

specifications) which present problems to building a school on the BLC site. Actually it is the old Doheny Oil Field with many many more abandon oil wells without being cap according to present City specification of which the DEPT. OF TOXIC SUBSTANCES CONTROL is aware of for the area.

December 2004 and January 2005 the oil wells in and around Rockwood Street and Belmont Avenue are being cap to develop the vacant lots which also have abandon oil wells, etc.

DTSC Response 6

DTSC is responsible for addressing the environmental concerns at the school site. The proposed gas mitigation system for the school is designed to prevent exposure to hydrogen sulfide and accumulation of methane. Gases are prevented from entering the school buildings with redundant safety measures, including the use of gas barriers along with passive/active vent pipes, ventilation enhancement, and a continual gas monitoring system. In addition, a large gas dispersion sand layer will be placed in the open areas at the school (areas with no buildings or concrete paving). This will allow gases to naturally disperse, instead of being forced to move into the surrounding properties. As part of the ongoing Operation and Maintenance activities that will take place regularly at the school for years to come, gases will be monitored along the perimeter of the school property to ensure there is no gas movement to surrounding properties. DTSC is confident that the proposed system will be protective for students, teachers, and staff at the school as well as residents of the surrounding community.

The Proposed Los Angeles Learning Center #1, located at the former Ambassador Hotel site, is moving forward. DTSC acknowledges the significant delays in that project as well as the Belmont project, however, environmental concerns are not the primary reason for delays at the Ambassador Hotel site.

DTSC has made significant efforts to inform the public regarding the environmental issues at the Central Los Angeles High School #11 (Belmont) site. Fact sheets have been mailed to the residents of the adjacent community and several public meetings have been held.

DTSC has no knowledge about the incident at the Rockwood Street residence. It is DTSC's understanding that the majority of the structures located in that area do not have methane mitigation systems beneath them, since they were built prior to Los Angeles City codes requiring these systems. For the most part, since the homes cover a relatively small area, gases can easily migrate around the small slabs and be vented naturally to the atmosphere through open grass lawns and other landscaped areas, so the potential for gas accumulation is small. If methane gas is detected in an enclosed space, the City of Los Angeles can require the building be vacated and demolished, if mitigation is not feasible. The

proposed gas mitigation system for the Belmont site has been designed to ensure gases are safely vented to the atmosphere to prevent accumulation under the school buildings.

A comprehensive characterization of the current soil conditions at the Site has been conducted throughout the Remedial Investigation process. Based on the Human Health Risk Assessment conducted during these investigations, the current soil conditions do not pose a threat to public health or the environment.

Methane and hydrogen sulfide gases can be emitted from operating oil wells. Issues related to the active oil production wells located north of the school site are the responsibility of DOGGR, and the Air Quality Management District (AQMD) is responsible for overseeing gas emissions from operating oil wells. DTSC does not have regulatory authority to oversee oil well operations for gas emissions.

Due to the concern for potential re-pressurization of the oil field when oil field production is discontinued, two independent studies of the oil field were conducted at the Site. The studies concluded that the oil field was unlikely to re-pressurize and that pressurization could be sufficiently monitored by the pressure monitoring well, LAUSD #1B, located adjacent to the school property. All of the historical oil wells that were located on the site have been abandoned under the oversight of the California Division of Oil, Gas, and Geothermal Resources (DOGGR). In addition, the four (4) adjacent ("Toluca") oil wells operated by the LAUSD were properly abandoned under DOGGR oversight in 2003.

Public Comment 7a

You know, listening to these comments, there is something very surreal. If you have to go through all of that in order to make an environment safe, it would seem to me you wouldn't begin -- it's like a Rube Goldberg contraption that's being created with active and passive blowing. Now, I know there are people here who are expert in these areas because one of the things I wanted to raise because we are talking about environment, in New York there is a campaign, it's called "Idling Gets You Nowhere". This site is surrounded by two freeways: the harbor and the 101. The idling that takes place on those freeways creates its own toxins. And they are very close. And you are discharging with these vents that up in the air -- there's something horrible to the environment for us to be facing this. Because new residential development (unintelligible) so you're discharging that and then this other toxic element. These are parking lots -- you know how these freeways can be -- how do you mitigate that in addition to these other elements.

DTSC Response 7a

The proximity of the freeway was studied as part of the Environmental Impact Report (EIR) prepared for the Site under the California Environmental Quality Act. Gases emitted from vehicles on freeways do not accumulate in open areas. Particulate-associated pollutants emitted from vehicles may settle in this manner. However, prevailing winds are to the west and the freeway(s) are located to the east of Site. Please see the detailed analysis of off-site air impacts and Health Risk Assessment presented in the EIR for more information.

In addition, gases that are vented to the atmosphere through the proposed gas mitigation system will be vented at concentrations significantly below toxic levels. The system does not pull or extract gases from the surface. Construction of the school will not generate toxic gas emissions that will impact the students, teachers, or staff at the school or those in the surrounding community.

Public Comment 7b

This campaign in New York is for cars which idle in front of schools, because of the high levels of asthma for many of New York schoolchildren. So you're talking about setting back a wee bit is meaningless.

DTSC Response 7b

LAUSD and other school districts have made efforts to build schools in neighborhoods so kids can walk to schools. So there's less traffic, less dropping off, less vehicle congestion in the neighborhoods. This is discussed in the EIR.

Public Comment 8

All these people that are hired, these investigators, to make sure before you start doing construction and guarantee it's going to be safe, I want to know in the future, if anything happens when the school is built and there's any type of incident, who will be responsible for liability? Will it be the state, L.A. Unified School, or all these private companies? The land that's on Colton, Toluca and First Street, it was given to Santa Monica Conservancy, the Y.M.C.A., for 20 years at a dollar a year, which I'm not happy about. They sold us out, okay. It's always they take away from the poor to give to the people with the power and the money. If anything happens to the park, Vista Hermosa, and the boys from the Y.M.C.A. from downtown and the soccer field, who is going to be responsible for any kind of liability? What is the policy limit if anybody died there?

DTSC Response 8

LAUSD, as the Site owner, is legally liable for the Site. DTSC does not have information or involvement in LAUSD insurance policies. DTSC is responsible for complying with all state and federal laws regarding environmental review of the proposed school property. DTSC has fully complied with these laws, and will continue to comply by providing ongoing oversight of the gas mitigation system through a legally enforceable Operation and Maintenance Agreement between LAUSD and DTSC.

Public Comment 9a

Regarding the mitigation, the gas mitigation, some of my specific questions are: What is the longevity of the system? What is the longevity of the vapor barrier?

DTSC Response 9a

The gas mitigation system was designed using technology that is in place at various sites where methane and hydrogen sulfide are present in the subsurface. One example of this is in landfills, where HDPE membranes have been used for the last 20 years. Long-term testing on these membranes at high temperatures has estimated the longevity to be a minimum of 100 years. Regarding the other components of the system, such as air blowers, gas detectors and alarms, these devices will be tested periodically during ongoing Operation and Maintenance activities.

Public Comment 9b

I'm a plumbing contractor. This is a little technical. What is the schedule for the pipes that they are planning to use for the mitigation problem, the tubes? What are the size of the holes? What is the maintenance procedure to keep the sand from filling in, then? How is that going to be maintained through its life span for the large areas that are going to be under mitigation?

DTSC Response 9b

The conceptual designs of the gas mitigation system proposed in the RAP are not yet final. Details such as the schedule of the pipes will be determined during the Remedial Design phase. To keep sand or other particles from entering the pipes, the pipes will be wrapped with a cloth-like geo-fabric.

Public Comment 9c

Another interesting question that came to my mind is could the capping with the membrane actually exacerbate the problem of the gases and actually be creating a hazard by bringing them -- instead of having them defused or bringing them in and collecting them and putting them out into the atmosphere more densely?

DTSC Response 9c

Capping the area with a membrane may disrupt the natural venting of gases. For this reason, the proposed gas mitigation system is needed to provide a preferential pathway to vent gases to the atmosphere and prevent accumulation under the school buildings. The concentrations of gases that will be vented from risers at the roof of the buildings will be very low because gas concentrations underneath the buildings are low. Any gas that does reach the riser will immediately disperse into the atmosphere. In areas where the highest gas concentrations have been detected at the Site (the northeast- future baseball field area), a sand diffusion layer and vent system is being placed instead of a membrane. The sand diffusion layer will create a large area into which the gases can be diluted to very low levels.

Public Comment 9d

And where are these, specifically to the baseball field -- actually where Patty lives -- are these vents going to be located along Boylston Street instead of along the other side? Maybe that would be an interesting thing to think about.

DTSC Response 9d

The layout of the vent risers will be designed based on the required efficiency of the venting system evaluated during the Remedial Design phase. To the extent possible, vent risers will be located away from nearby residential properties.

Public Comment 9e

Of course, one of the most interesting things is: the water table, of course, has been raised since our last rains. This is something we haven't seen in quite sometime. It would be nice to see some recent data on, ah -- regarding the -- I lost track of my thought -- no, regarding not only the water table, but regarding the gas levels.

DTSC Response 9e

Groundwater levels do rise during rainy years. DTSC has reviewed data on groundwater levels and corresponding soil gas levels at the Site. Groundwater levels in the southern portion of the Site are much higher (more shallow) than levels in the northern portion. The groundwater level in the southernmost portion of the Site (at the intersection of First Street and Beaudry Avenue) has fluctuated from a depth of approximately 5 feet below ground surface (bgs) in 1999, to approximately 10 feet bgs in 2002, 8 feet bgs in December 2003, and 2.3 feet bgs in January 2005. Due to shallow groundwater in this area, a dewatering system is needed to ensure the parking garage does not become flooded. In

comparison, the groundwater level in the northernmost portion of the Site was 97.6 feet bgs in 1999 and 97.6 feet bgs in 2002 (the last time the level was measured at this location).

Gases in the soil above the groundwater will move as usual by diffusion into areas of lower concentration. Based on data presented in the RI/FS, groundwater levels have not had a significant effect on soil gas concentrations. At the intersection of First Street and Beaudry Avenue, subsurface gas concentrations are so low that it is not possible to see meaningful trends in concentrations with changes in groundwater levels. The data do not appear to show an increase of soil gas concentrations when groundwater levels rise. However, it is important to note the gas mitigation system is designed to handle any gas concentration and prevent accumulation to levels of concern. Please see also DTSC Response 1p above.

Public Comment 9f

How can the membrane be repaired? How are they going ensure that it's always going to be intact if it's underneath concrete?

DTSC Response 9f

During the Remedial Design phase, a detailed Construction Quality Assurance Plan will be finalized to set forth the construction specifications regarding testing, monitoring, and inspection procedures to be followed during construction of the membrane and all other components of the gas mitigation system. The membrane will be carefully installed, sealed, and inspected. Each conduit through the membrane (for electrical, plumbing, etc.) will be sealed with a membrane boot and tested for leaks. A layer of sand will then be placed on top of the membrane and then the concrete slab will be poured. The slab will protect the membrane from tears or rips. An Operation and Maintenance Agreement between DTSC and LAUSD will require all subsurface maintenance work to be protective of the membrane, and for DTSC to be notified of such work. If, at any time, it is necessary to puncture the membrane to install subsurface equipment for the school, the membrane will be repaired and tested. As part of ongoing Operation and Maintenance at the school, any leaks in the membrane would be detected by the gas detection and alarm system.

Public Comment 10

How far above the buildings will these vents be?

DTSC Response 10

The vent risers will reach a minimum distance of two feet above the roofline.

Public Comment 11a

Okay. I just had three questions. And one of them was how significant would a seismic event have to be in order for Operation and Maintenance to occur? Because that wasn't mentioned.

DTSC Response 11a

A significant seismic event is defined as at least a 5.0 on the Richter scale, recorded at a seismometer station within ten miles of the school. In addition, if an earthquake-activated automatic natural gas shutoff valve is triggered, it is considered a significant seismic event and Operation and Maintenance (O&M) activities will be required. Please also note that O&M activities will be conducted on a regular basis with DTSC oversight and regular reporting to DTSC. In the beginning the O&M will be conducted on a daily basis. Depending on the results of monitoring, the frequency may be changed to monthly, and then quarterly, and annually.

Public Comment 11b

And the second question, what particular sites, for example, this plan -- the alternate plan, alternative three remedial plan, I wanted to know if there is any site in California or in the United States where it has been implemented, ah, just to see samples, just to do a little research.

DTSC Response 11b

Two other proposed school sites are implementing a similar gas mitigation system, Commonwealth Elementary School and Banning Elementary School, both part of the Los Angeles Unified School District. The Commonwealth system consists of a membrane and passive venting, and the Banning system consists of a membrane and passive venting with an active air injection system, very similar to the proposed gas mitigation system for this Site.

Public Comment 11c

And my third question is would the experts -- Dr. Oudiz and Ms. Jones and also the gentleman -- would you, with all your expertise and all the information that you have given tonight, would you feel comfortable sending your children to that school?

DTSC Response 11c

DTSC standards for proposed school sites are very conservative in order to be fully protective of public health of school children and adults. DTSC staff responded yes to the question at the public meeting.

Public Comment 12a

Now, where is alternative three being used locally, alternative three, and what is the experience?

DTSC Response 12a

The gas mitigation system for the Banning Elementary School Site is the nearest to the alternative being proposed at this Site. The Banning system was designed by the same engineering company, and also has the passive/active venting system.

Public Comment 12b

Does the vegetation layer have any effect, good or bad?

DTSC Response 12b

The vegetation layer will provide landscaping and turf in the open areas of the school. The vegetation layer will be placed on top of eighteen inches of soil and eighteen inches of sand in the open areas. A water drainage system will be installed to divert irrigation water as well as rain water from entering the sand layer below. This does not have any effect on the gas mitigation, other than providing another layer of buffer between the subsurface gases and the surface.

Public Comment 12c

How are you going to retrofit under the existing buildings on Beaudry?

DTSC Response 12c

Some of the existing buildings do not have concrete slabs. In these buildings a membrane and piping system will be constructed as with the new buildings. In the existing buildings that already have slabs, there will be a raised floor, under which the membrane and piping system will be installed. In the parking garage, it is not possible to install a raised floor, so the ventilation in the parking garage will be enhanced and gases will be continually monitored.

Public Comment 12d

And monitoring was mentioned about an O&M Agreement, a 24-hour surveillance. If the alarm goes off in the principal's office, who do you call? You know, I mean, what is the safeguard? Who hears the alarm at 3:00 a.m., if there's a spike in the hydrogen level?

DTSC Response 12d

The gas mitigation system is automated so that if, in the middle of the night, gases are detected, the system will automatically trigger the air blowers and start flushing the air through until it lowers the gas concentrations beneath the membrane to safe levels.

Public Comment 12e

And slide 27, it shows the pipes, but it does not mention the membrane. My business is law, not engineering, but I don't understand how, if you put a membrane around the pipes, whether it's the air pipe or the collection pipe, fine particles of sand are going to fill any membrane. How are you going to have the inter-flow of gas and air if you wrap the collector pipes and the air pipes with a membrane that supposedly can keep out fine particles?

DTSC Response 12e

A geo-fabric is wrapped around the gas collection pipes to prevent sand and particles from entering the pipes. The fabric allows gases to move in the pipes, but prevents particles from clogging the pipes. The membrane is located above the pipes, and prevents gases from moving into the buildings.

Public Comment 13a

What is the cost of all this?

DTSC Response 13a

The estimated cost for the proposed gas mitigation system is $8,160,000, including the long-term Operation & Maintenance.

Public Comment 13b

What's the cost of the more active alternative?

DTSC Response 13b

The estimated cost for Alternative 2 is $12,290,000.

Public Comment 14

Yeah, because from what I see, it's just a lot of people with big nice suits and everything. But, I mean, we are asking so many questions, but the answers we're getting is, like, so vague. We're not getting -- like how many millions of dollars are set aside for the safety of our children for the insurance? We have a

lot of children sick from asthma. They have asthma because they have to live in this community. We want to make sure that we have people accountable in case something happens to our children because we already have been waiting and waiting. Who is accountable? Look at our children's education. Is it LAUSD? It is the worst maybe in the whole country, in the whole country, and who's accountable? The superintendent? He is just becoming richer and richer every day. And one more question: who is going to -- they sold part of the Belmont Complex to Santa Monica city? Who is going to be accountable if something happens to our children while they are there? The Santa Monica city? LAUSD? The environmental city? Who is going to be accountable?

DTSC Response 14

LAUSD, as the Site owner, is legally liable for the Site. The Mountains Recreation and Conservation Authority, as lessee of the Park side would also have liability for the Park. Please note that before the park or school opens, DTSC is going to evaluate the system to ensure it is working efficiently to protect public health.

Public Comment 15

I have a very quick question. I would like to discuss or know more about did we get any earthquake fault studies within that general area where the school was built? Also within these studies, do you have any way to guarantee that these valve systems for that gas mitigation system -- could they actually withhold an earthquake? Can you help me understand how -- that''s it. Say there's an earthquake, will the valves actually function during an earthquake and actually mitigate those gases and protect the children in case there's an earthquake? Also, is the school, is it structured in such a way to actually be retrofitted for an earthquake? Can it survive? I mean, you're spending all these billions of dollars on the school, and you're going to have to spend more billions to rebuild it. So I'm hoping that maybe some of this building could actually be salvaged after an earthquake.

DTSC Response 15

There was an extensive trenching investigation conducted on the Site itself, which mapped the location of the earthquake fault and resulted in the determination that the fault could not be demonstrated to be inactive. This required the demolition of two buildings located above it. All of the school buildings are designed by registered engineers, and the design is approved by the California Division of the State Architect, so that in the event of an earthquake the buildings would be safe.

Public Comment 16 (translated from Spanish)

First, who is the engineer who came in the first time when they started construction? What is the name? Who are the guys who sign it for construction there? Why are you working backwards? Who were the engineers that gave the go ahead to begin the project in the first place, and where did they go to school? Why do you guys do things backwards here, by building the school first, not doing environment? Where was this field engineer? The first question is why is everything done backwards here? Because I know a little bit about construction. First of all, who is that field engineer who gave the okay and made the decision? Where is he? The ones that studied about the field that didn't realize that it was highly contaminated. Second, who is that specialist in gases and toxic materials and all that? Where was he when the construction started?

DTSC Response 16

At the time, DTSC was not involved because school districts were not required to obtain approval from DTSC of a proposed school site with respect to environmental contamination until revisions to California Education Code became effective in January, 2000. Current state law now requires DTSC to oversee a rigorous environmental review and cleanup process of all proposed school sites prior to acquisition or construction.